

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Attorney Docket No. 006916.00007)

In re U.S. Patent Application of Schetelig,)
et al.)
Application No. 09/981,795) Group Art Unit: 2611
Filed: October 19, 2001) Examiner: Zheng, Eva Y.
For: Method and a Device for Controlling) Confirmation No. 6987
Data Extraction from a Data Stream)
Containing at Least One Data Packet)

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-14501

Sir:

Applicants respectfully request review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a Notice of Appeal. The review is requested for the reasons stated in the below remarks. If any fees are required or if an overpayment is made, the Commissioner is authorized to debit or credit our Deposit Account No. 19-0733, accordingly.

REMARKS/ARGUMENTS

Having received and reviewed the final Office Action dated November 2, 2006 Applicants respectfully submit that the outstanding rejections are based on one or more clear errors, and that the appeal process can be avoided through a pre-appeal brief review as set forth in the Official Gazette notice of July 12, 2005. Claims 12-28 are pending. Claims 12-19 and 22-26 stand rejected. Claims 20-21 and 27-28 stand objected to and were indicated as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

There are two outstanding rejections in the instant application; Claims 12-15, 18 and 22-25 are rejected under 35 USC §102(e) as being unpatentable over Ohsuge, U.S. Patent No. 6,768,729 ("Ohsuge"); and Claims 16-17, 19 and 26 are rejected under 35 USC §103(a) as being unpatentable over Ohsuge in view of Gurney, et al., U.S. Patent No. 5,619,542 ("Gurney").

The specific error relied upon in the Pre-Appeal Request for Review pertains to the Office Action's assertion that Ohsuge teaches the claimed features of "starting data extraction from the bit stream when the correlation value exceeds a threshold value . . ." and "restarting data extraction from the bit stream when the new correlation value exceeds the stored maximum correlation value." (Emphasis Added).

Applicants submit that Ohsuge does not relate to comparing a bit stream from a digital data stream with an expected bit sequence and specifically does not teach the claimed feature of "starting data extraction from the bit stream when the correlation value exceeds a threshold value indicating that a data packet has been detected . . ." (Emphasis Added). The Ohsuge disclosure relates to signal power distribution and, as such, fails to teach or suggest an expected bit sequence at all. Ohsuge merely discloses signal power distribution data in a "delay profile" used to analyze signal paths required to operate a rake receiver reception section. The "delay profile" contains signal power distribution with respect to delay times of the reception signals.

Independent claim 12 recites the claimed feature of "starting data extraction from the bit stream when the correlation value exceeds a threshold value indicating that a data packet has been detected . . ." (Emphasis Added). Regarding this claimed feature, the Final rejection of November 2, 2006, cites the following concerning Ohsuge for support:

rake receiver block 7 in Fig. 1 constitute as data extraction; a conventional CDMA receiver as shown in Fig. 22, wherein the rake synthesis section perform multipath extraction; Col. 1, L56-Col 2, L24)

Furthermore, the Final rejection cited Column 1 line 56 through Column 3 line 24 of which states:

As the CDMA receiver described above, the receiver shown in FIG. 22 is available, which is comprised of an antenna 21, RF reception circuit section 22, A/D (Analog/Digital) conversion section 23, multipath search section (multipath detection means) 24, and Rake synthesis reception section 25 for in-phase-synthesizing (Rake-synthesizing) a plurality of paths.

In the conventional CDMA receiver having such an arrangement, the multipath search section 24 measures a delay profile (a signal power distribution with respect to delay times), selects several paths having high signal powers within the measurement range, and notifies the Rake synthesis reception section 25 of the timings of the paths. The Rake synthesis reception section 25 performs despreading in units of paths on the basis of the timing information, and performs Rake synthesis, thereby obtaining a path diversity effect.

The Rake synthesis reception section 25 may have a means (path tracking means) for following the movement of an independently designated path. In this case, the multipath search section 24 must send path information to the Rake synthesis reception section 25 at least in an initial period or in predetermined cycles. This CDMA receiver and multipath search method are disclosed in Japanese Patent Laid-Open No. 9-181704 or the like.

In the above conventional CDMA receiver, the multipath search section measures a delay profile, selects several paths having high signal powers within the measurement range, and notifies the Rake synthesis reception section of the timings of the paths.

In general, however, a delay profile contains a large quantity of data, and hence it takes time to search for peaks from all the data. For this reason, to search for several paths from the measured delay profile, maximum values corresponding to the number of paths to be searched out must be retrieved, or all the profile data must be sorted.

Applicants respectfully submit that the above statements and portions of Ohsuge do not disclose, teach or suggest the claimed feature "starting data extraction from the bit stream when the correlation value exceeds a threshold value indicating that a data packet has been detected . . ." (Emphasis Added). As may be seen from the above cited portions, Ohsuge merely discloses a CDMA receiver comprising an antenna, RF reception circuit, A/D conversion section, multipath

search section, and a Rake synthesis reception section. The multipath search section of the CDMA receiver measures a delay profile, selects several paths having high signal powers within the measurement range, and notifies the Rake synthesis reception section of the timings of the paths. The Rake synthesis reception section performs despreading in units of paths on the basis of the timing information.

Hence, the feature of "starting data extraction from the bit stream" is neither disclosed nor suggested by Ohsuge. Moreover, Ohsuge, and in particular the citations referred to by the Examiner, is indeed silent about comparing a bit stream with an expected bit sequence or determining a correlation value for detecting a data packet all of which are claimed in independent claim 12. In fact, Ohsuge fails to teach or suggest an expected bit sequence at all.

Furthermore, Gurney does not make-up for the deficiencies of Ohsuge as Gurney also fails to disclose the claimed feature of "starting data extraction from the bit stream when the correlation value exceeds a threshold value indicating that a data packet has been detected . . ." (Emphasis Added). Therefore, for at least these reasons Applicants respectfully submit that independent claim 12 is condition for allowance. Dependent claims 13-17 and 22 which ultimately depend from independent claim 12 are condition for allowance for at least the same reasons as independent claim 12.

In addition, independent claim 12 recites the claimed feature of "restarting data extraction from the bit stream when the new correlation value exceeds the stored maximum correlation value." (Emphasis added), and independent claims 18 and 24 both recite the claimed feature of "starting or restarting data extraction from the bit stream when the correlation value exceeds a threshold value or a stored maximum correlation value . . ." (Emphasis Added). Applicants respectfully submit that none of cited documents disclose or suggest such a conditional restart of the data extraction from the bit stream as defined in independent claims 12, 18 and 24.

Therefore, for at least these reasons Applicants respectfully submit that independent claims 12, 18 and 24 are in condition for allowance. Dependent claims 13-17, 19-23, and 25-28 which ultimately depend from one of independent claims 12, 18 and 24 are in condition for allowance for at least the same reasons as the independent claim from which they depend.

All issues having been addressed, Applicants respectfully submit that the instant application is in condition for allowance.

Respectfully submitted,

Dated: February 2, 2007

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